The fixed charges on the roads built by the mixing method in the way of interest and sinking fund makes it more costly and less economical in the end than the cheaper road built by the penetration method with a moderate cost of maintenance. For instance, a mile of road built by the penetration method, assuming an average cost of $1.10 per square yard and a 16 foot roadway, will cost $10,320, and should be capably maintained for $250 per annum.

On the other hand, a mile of road of the same width built by the mixing method, assuming an average cost of $1.60 per square yard, will cost $15,010. This necessitates an interest charge on the extra $4,690 cost, which at 4½ per cent would be $211 per year. To this must be added a sinking fund of 1 per cent, which would make a total of $258. Assuming that the maintenance cost of the road built by the mixing method is no more than that of the one built by the penetration method, this gives $258 as the annual excess upkeep cost per mile of highway. When it is considered that for moderate traffic roads the life of the two would be about the same, it is at once evident that a great saving is effected by the adopting of the former type.

We are on the eve of an era in road building comparable only to railway building between 1840 and 1880. There is every evidence that we will be able to obtain roads suitable for a moderate amount of traffic at a reasonable cost. We need not be driven always to the most costly types of roads, the building of which would very greatly reduce the mileage of new roads which could be built with reasonable appropriations. To the fullest extent in an economical way, we should seek to extend the greatest good in the way of roads to the greatest number of people. The cheapest road that is suitable for the traffic should be built. The bituminous macadam road built by the penetration method according to the methods laid down in this paper, with careful inspection, and with competent engineering supervision, is destined to play an important part in the building of the main country highways of the future.